COMPREHENSIVE FLOODPLAIN MANAGEMENT PLAN

Adopted by City Council Resolution no. 17-029

ANNUAL PROGRESS REPORT APRIL 2018

CITY OF SANIBEL
LEE COUNTY,
FLORIDA

The 2017 Comprehensive Floodplain Management Plan replaces The 2005 Floodplain Management Plan of the National Flood Insurance Program Community Rating System updates the Plan adopted by City Council (Resolution no. 95-89) on April 18, 1995. This updated Plan reflects changed conditions; the progress made in implementing the Plan, and provides direction for future actions.

National Flood Insurance
Program Community
Rating System
Activities 510 & 520

National Flood Insurance Program, Community Rating System

The City of Sanibel is currently designated a Class 5 community. The most recent verification visit was on May 16, 2017. Although some sections have been pointed, our overall scoring has not been complete at this date. The current rating allows a 25% reduced flood insurance premium for residents of the City of Sanibel.

Comprehensive Floodplain Management Plan

On May 3rd, 2016, City Council approved Resolution 16-032, establishing the City of Sanibel Floodplain Management Planning and Mitigation Advisory Committee to Sanibel City Council. The Committee included William Dalton, Former Chair, Sandy Larsen, Chair, Eric Pfeifer, Vice Chair, Chris Heidrick, Jim Jordan and Harold Law. Each member has expertise in one or more of the following categories of activities: preventative measures, property protection, natural resource protection, emergency services, structural flood control project, and public information. The purpose and function of the Committee was to study, plan for and advise the City Council on preparation of the Plan.

The Committee identified flood hazards that pose a risk; assessed the City's vulnerability to these hazards; and examined potential projects to mitigate them. Based on the risks for each of the flood hazards, the Committee validated the 6 goals identified in the 2005 Plan and added a 7th goal to allow for pre and post disaster redevelopment and mitigation policies and procedures designed to reduce or avert Sanibel's future disaster potential.

Based on the hazards and risk assessment, current goals, current flood hazard mitigation activities, input from outside agencies, the public and the City Council, 15 of the Existing Mitigation Activities from the previous plan are included and 20 New Mitigation Activities were added.

A Repetitive Loss Plan is required for communities that have 50 or more repetitive loss properties. A repetitive loss property is a property for which two or more claims of more than $1,000 have been paid by the NFIP within any rolling 10-year period since 1978. The City of Sanibel has 64 repetitive loss properties and is required to have a Repetitive Loss Plan as part of its Comprehensive Floodplain Management Plan.

On April 4, 2017, City Council adopted Resolution 17-029 adopting the 2017 Comprehensive Floodplain Management Plan. The National Flood Insurance Program (NFIP) provides federally supported flood insurance in communities that regulate development in floodplains. The Community Rating System (CRS) grades the various Community Floodplain Management Programs and reduces flood insurance premiums in those communities that meet certain requirements. Sanibel was the first City in Lee County to join the NFIP in 1979.

Risk Map Update

On 3/6/18, FEMA consultants had the Storm Surge Analysis Update Meeting (IDS#3). Overall, there was not a substantial difference in elevations from the last map relating to Storm Surge. Generally the elevations nearest the Gulf were slightly lower and areas landward were slightly higher.

The most current timeline for the new Risk Map are as follows:

IDS3 (Storm Surge) is being finalized now, currently in questions and answers.

As of now, the Work Map product is anticipated to be released Summer-Early Fall of 2018. This product will include Coastal Data only.

Preliminary Maps are anticipated to be released in Spring of 2019. These will include Riverine. For Sanibel, there may not be much change between the Work Map and the Preliminary Map.

There will be an Open House Scheduled after the release of Preliminary Maps.
Appeal process follows.

Florida Hurricane Irma (DR-4337)

Hurricane Irma hit southwest Florida on Sept 10, 2017. A Major Disaster was declared on the same day. At this date, the amount of damage from Hurricane Irma is not yet known. Most of the damage was in the form of wind and debris. To date, we are unaware of any flood claims.

Current Florida FEMA assistance information:
Individual Assistance Applications Approved: 772,253
Total Individual & Households Program Dollars Approved: $990,171.889.67
Total Public Assistance Grant Dollars Obligated: $17,939,140.71

The largest expenditure for the City of Sanibel was in Debris Management. The City picked up and hauled over 170k cubic yards of debris to the Island Inn Road Debris Management Site (DMS). The DMS debris was then mulched and hauled off Island and also stored for City use. The City has estimated total expenditures from IRMA near 4 million dollars.

Joint Unified Local Mitigation Strategy (LMS)

On 6/5/17, the City of Sanibel adopted Resolution 17-026, adopting the Lee County Joint Unified Local Mitigation Strategy. The LMS details the hazards, both natural and man-made, that Lee County could experience and eliminated. The plan describes specific strategies and projects that could be funded should federal mitigation dollars be available after a declared disaster and the Federal Emergency Management Agency and the Florida Division of Emergency Management require Lee County and all six

municipalities within the boundaries of Lee County to adopt the updated plan in order to be eligible for this funding.

A Major Disaster Declaration was declared for Florida Hurricane Irma (DR-4337) on September 10, 2017. On February 5, 2018, the Florida Division of Emergency Management (the Division) announced the availability of Hazard Mitigation Grant Program (HMGP) funds as a result of Irma. HMGP funding is available only to those counties that have a current FEMA-approved Local Mitigation Strategy. Lee County originally estimated to receive $64 million based on early estimates of IRMA damage. That figure has been reduced to $25 million dollars based on more recent estimates and that figure will continue to adjust of the coming months. The County and local Jurisdictions are in the process submitting applications based on the scoring of eligible projects to the State by 8/6/18.

Eligible Activities include mitigation projects that will result in protection of public or private property from natural hazards.

The City of Sanibel submitted 7 projects to be included in ranking for Lee County. The following projects were submitted. The LMS group will rank the projects in April and May. Once ranked, the City will need to submit completed applications to the State by 8/6/18.

Drainage Related:

1. Enhancement of Sanibel Slough Drainage System and Beach Road Weir Upgrade $620,000
2. Tahiti-Jamaica Area Drainage Improvements $250,000
3. East Rocks Area Drainage Improvement $150,000

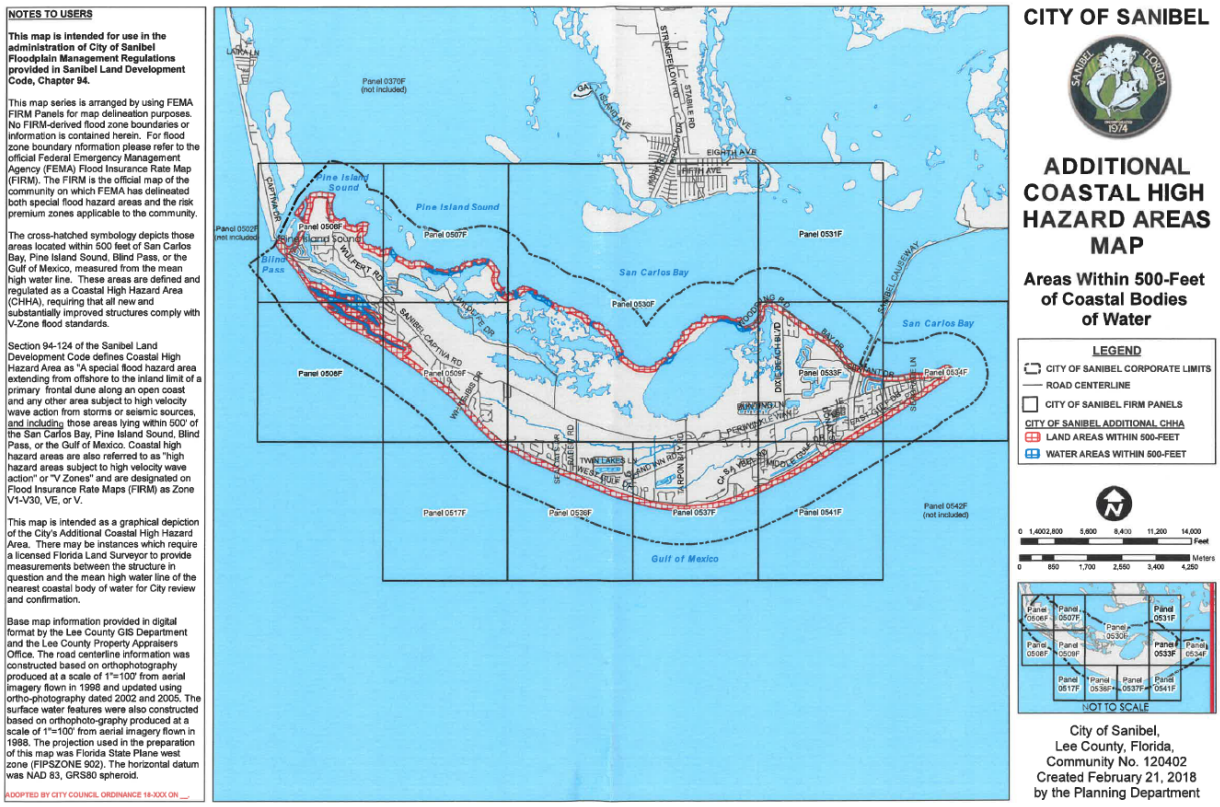
Critical Facilities:

4. Floodproofing and Hardening of New Emergency Management Wing $ 50,000
5. Police Hurricane Shutters $ 65,000
6. Generator Sanctuary WWTP & Lee Co. Public Safety and Emergency Communications Tower $150,000
7. Generator Donax Wastewater Treatment Plant $950,000

ADOPTION OF MODEL FLOODPLAIN ORDINANCE COMPLETED

On April 3rd, 2018, the Sanibel City Council adopted Ordinance 18-002 adopting the Model Floodplain Ordinance. City Staff worked with the Florida Division of Emergency Management on the development of a model floodplain ordinance blending the existing Sanibel flood regulations with the requirements and flood design standards of the Florida Building Code. The ordinance was adopted to serve two primary purposes – to ensure consistency with the FEMA-approved flood design standards referenced in the Florida Building Code, and to fulfill Sanibel's commitment to, and continued participation in, the National Flood Insurance Program and the Community Rating System. The existing higher standard of requiring V-zone construction within certain A-zones, and also earns CRS credits, was preserved by the

adoption within the ordinance of an Expanded Coastal High Hazard Area Map. The Florida Building Code now requires a one foot freeboard.



BLIND PASS INLET MANAGEMENT STUDY UPDATE

On April 6, 2018, the Technical Advisory Committee held a webinar on the Blind Pass Inlet Management Study. The Production Run Phase has been completed utilizing 3 alternatives under both average

conditions, and under the storm conditions of Hurricane Charley and 2016 Cold Fronts. The Study Findings are identified below.

STUDY FINDINGS

- Material dredged from Blind Pass inlet should be placed to the downdrift beach of Sanibel Island, i.e. bypassed, in an effort to balance the sediment budget.
- Bypassing does not completely offset the erosion on Sanibel Island based on the sediment budget.
- The truncated template partially maintains the natural bypassing bar, and reduces the disruption of sediment transport, and therefore reduces the negative effect on the downdrift beaches that occur after dredging.
- Bypassing the material that accumulates in the channel to the north end of Sanibel Island creates a buffer to absorb the inlet-induced dynamics at the north end of the island.
- Enhancing the connection between the Gulf of Mexico and Pine Island Sound increases the tidal flux, and therefore the inlet stability.
- The influence of a jetty structure on the north end of Sanibel Island has little effect on the channel stability. The structure would function as a revetment to protect the north end from erosion during channel migration and stabilize the north end of Sanibel in times of fluctuations in channel location.
- A spur at the end of the Blind Pass jetty enhances channel stability. The spur redirects some flow (and sediment transport) away from the inlet, thereby reducing channel migration to the south.
- The fill placement zone can be optimized based on erosion signature (R-110.5 to R-112).
- Storms can have a variety of effects on Blind Pass. Storms may cause infilling and/or scour.

The Draft Management Components are identified below:

DRAFT MANAGEMENT COMPONENTS

- Continue to dredge Blind Pass.
- Continue to bypass material dredged from Blind Pass to Sanibel Island.
- Truncate the seaward end of the current dredge template to maintain the natural bypassing pathway.
- Considering implementing new management strategies in a phased approach, and monitor.
- Shift the sand placement of the bypassed material to the north.
- Extend the current dredge template landward to Pine Island Sound.
- Establish connection to Sunset Bay, and continue the connection landward to Pine Island Sound.
- Install a spur at the end of Blind Pass jetty.
- Implement a monitoring plan.

A public meeting has been scheduled on April 27, 2018 at South Seas to present the modeling results and accept questions and answers.

IMPLEMENT, EVALUATE AND REVISE

The City has been implementing its Floodplain Management Plan since 1995. The implementation of this Plan is an important part of the City of Sanibel's continuing commitment to responsible growth management. Through the Action Plan, the City will move toward achieving the goal of reducing and eliminating flood hazards in the community.

The Committee that prepared this Annual Update of the plan will submit the report to City Council. This report will be submitted to the Federal Emergency Management Agency at the Annual Recertification. The report will also be released to the media and made available to the public.

The 2017 Floodplain Management Plan will be updated in 2022 or before as necessary. The Committee will meet annually to discuss the status, consider knew items and funding and prioritized.